

No. 15630

United States
Court of Appeals
for the Ninth Circuit

AMERICAN PIPE AND CONSTRUCTION CO.
Appellant,

vs.

SPENCER A. EARNSHAW, Appellee.

Transcript of Record

In Two Volumes

VOLUME II.

Book of Exhibits

(Pages 245 to 411, inclusive)

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Southern District of California,
Central Division

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PLAINTIFF'S EXHIBIT No. 2

S. A. Earnshaw Patent No. 2,168,329

Filed Jan. 2, 1937

Patented Aug. 8, 1939

PLAINTIFF'S EXHIBIT No. 5

S. A. Earnshaw Patent No. 2,639,943

Filed April 30, 1948

Patented May 26, 1953

PLAINTIFF'S EXHIBIT No. 6

S. A. Earnshaw Patent No. 2,639,942

Filed Nov. 5, 1948

Patented May 26, 1953

PLAINTIFF'S EXHIBIT No. 7

S. A. Earnshaw Patent No. 2,681,725

Filed June 20, 1949

Patented June 22, 1954

DEFENDANT'S EXHIBIT "B"

W. R. Brend Patent No. 2,380,499

Filed Jan. 14, 1942

Patented July 31, 1945

DEFENDANT'S EXHIBIT "F"

November 28, 1950

Mr. Spencer A. Earnshaw,
132 East 77th Street,
Los Angeles 3, California.

Dear Sir:

We hereby authorize you to enter into a non-exclusive license agreement with the Lock Joint Pipe Company of East Orange, New Jersey, for the use by them of an apparatus covered in your United States Patent No. 2,168,329, issued August 8, 1939, for a plaster machine and methods.

It is understood and agreed between you and ourselves that such non-exclusive license which you are granting to the Lock Joint Pipe Company will in no way affect the rights which we have under our agreement with you, dated February 8, 1944, for the use of said Patent.

You are to furnish us with an exact copy of the non-exclusive agreement which you execute with the Lock Joint Pipe Company.

Yours very truly,

AMERICAN PIPE AND CON-
STRUCTION CO.

/s/ H. H. JENKINS,

H. H. Jenkins,

Executive Vice President.

Accepted:

/s/ Spencer A. Earnshaw

Date: November 28, 1950.

HHJ:ha

cc: A. M. Hirsh, Jr. President Lock Joint Pipe
Company East Orange, New Jersey

DEFENDANT'S EXHIBIT "G"

LICENSE AGREEMENT

This Agreement made and entered into, in duplicate, by and between Spencer A. Earnshaw of 132 East 77th Street, Los Angeles, California, hereinafter referred to as "Earnshaw" and Lock Joint Pipe Company, a corporation duly organized and existing under the laws of the State of New Jersey, having its head office at East Orange, New Jersey, hereinafter referred to as "Lock Joint".

"Witnesseth":

Whereas, Earnshaw represents and warrants that he is the sole owner of U. S. Letters Patent No. 2,168,329, issued August 8th, 1939, and has full legal capacity to grant the non-exclusive license hereinafter granted;

Now, Therefore, in consideration of the mutual covenants hereinafter expressed, the parties hereto agree as follows:

1. Earnshaw hereby grants to Lock Joint a non-exclusive license under said Letters Patent No. 2,168,329, issued August 8th, 1939, to use the methods

covered by said Letters Patent, and sell the products thereof throughout the United States and its territories for the remainder of the term for which said Letters Patent is granted and for any extensions thereof and improvement patents thereof that may be granted for use only in the manufacture and/or lining and/or coating of pipe made of any material.

2. Earnshaw retains all other rights to the use of the patented devices and methods for any other purposes than the ones specifically conveyed to Lock Joint in Paragraph #1.

3. Lock Joint agrees to pay to Earnshaw a royalty of four-tenths of one cent (\$.004) per square foot of lining or coating on all pipe coatings made or caused to be made by Lock Joint where pipe coatings are accomplished by the performance of equipment covered by aforesaid Patent No. 2,168,329, or any improvement patents thereof that may be granted, excluding cast or molded pipe or pipe lined inside by centrifugal spinning process and excluding all inside lining of pipe of every kind unless such inside lining is accomplished by the performance of equipment covered by the aforesaid Patent No. 2,168,329, or any improvement patents thereof that may be granted. The said royalty shall become due and payable quarterly, the first royalty payment will be due on or before February 15, 1951, and covering all coatings placed by Lock Joint to pipe up to and including February 1, 1951.

4. At the time of paying royalty, Lock Joint

agrees to supply a written statement reflecting the total number of square feet of coating that Lock Joint has performed or caused to be performed with the apparatus or improvements, modifications or alterations thereof. If either Earnshaw or Lock Joint make any improvements to said Letters Patent No. 2,168,329, said improvements shall inure to the benefit of both parties, as in Paragraphs #1, #2 and #3.

5. Lock Joint agrees to keep true and accurate books of account of the coatings performed or caused to be performed by Lock Joint with the process subject of this agreement, and to hold the same open to the inspection of Earnshaw or his duly authorized representatives during all business hours, provided, however, that Earnshaw shall not require inspection of said books of account more frequently than semi-annually. Lock Joint agrees, during the life of this agreement, to pay a minimum of royalty of One Hundred (\$100.00) Dollars per month, payable quarterly, but the said payment shall be a full credit to Lock Joint on earned royalty in the same quarter as said earned royalty becomes due and payable. The One Hundred (\$100.00) Dollars a month minimum royalty shall start November 1, 1950, and shall be considered a complete fulfillment of the obligation of Lock Joint in respect to minimum royalties in any month upon payment by Lock Joint of said minimum royalty of One Hundred (\$100.00) Dollars.

6. This agreement shall inure to the benefit and

be binding upon the respective heirs, executors, administrators, successors, personal representatives and assigns of the parties hereto.

In Witness Whereof the parties to this agreement have executed the same this 28th day of November 1950.

/s/ S. A. E.

Spencer A. Earnshaw.

Witness:

/s/ (Illegible.)

Witness:

/s/ J. E. LONGLEY, Secretary

LOCK JOINT PIPE COMPANY,

/s/ A. M. HIRSH, JR.,

President.

DEFENDANT'S EXHIBIT "H"

[Letterhead of J. E. Simpson.]

[Pencil written note: In Tel. conversation with FFJ, 8/8/55 Earnshaw said Simpson no longer his attorney, and that he was engaging another.]

July 20, 1955

American Pipe & Construction Company,
P. O. Box 3428 Terminal Annex,
Los Angeles 54, California.

Attention: Robert V. Edwards, President

Gentlemen:

On June 2, 1955, I wrote you concerning the

License Agreement between Spencer A. Earnshaw and American Pipe & Construction Company, dated February 8, 1944, calling attention to our meeting of February 2, 1955. In that meeting, and in my letter, I called attention to the fact that American had not asserted that the Earnshaw patent No. 2639943, the so-called roller patent, was an improvement upon the earlier Earnshaw patent No. 2168329 which was the subject of the License Agreement, and that American had failed to pay the costs of patenting the invention covered by patent No. 2639943.

In your letter of June 13, 1955, you simply stated that you felt that little would be gained by repeating what had been said several times.

On behalf of Mr. Earnshaw I am hereby advising you that we now understand that it is American's position that Earnshaw's patent No. 2639943 is not included within the License Agreement between American and Earnshaw dated February 8, 1944; that American does not claim, assert or understand that the said patent No. 2639943 is an improvement upon the Earnshaw patent No. 2169329, the subject of the said License Agreement, and further that Mr. Earnshaw is now and at all times the refusal of American to pay the costs of patenting the latter patent has been, free to license others to manufacture, use and sell apparatus coming within the metes and bounds of Earnshaw's patent No. 2639943.

Yours very truly,

/s/ J. E. SIMPSON,

J. E. Simpson.

JES-d

DEFENDANT'S EXHIBIT "M"

[Title of District Court and Cause.]

DEPOSITION OF SPENCER A.
EARNSHAW

taken on behalf of Defendant and Counterclaimant, at 411 West 5th Street, Los Angeles, California, commencing at 10:00 o'clock A.M., Tuesday, February 5, 1957, before Ben A. Bell, CSR, Notary Public, pursuant to stipulation.

Appearances of Counsel: For plaintiff and counterclaim defendant: J. Marion Wright, J. Calvin Brown, and Owen E. Kupfer, Esqs., By J. Marion Wright and J. Calvin Brown, Esqs. For defendant and counterclaimant: Hill, Farrer & Burrill, Esqs., By: Frank D. MacDowell; and Mellin, Hanscom and Hursh, Esqs., By Oscar A. Mellin, Esq. [1]*

SPENCER A. EARNSHAW

having been first duly sworn, deposed and testified as follows:

Mr. Mellin: May we have the usual stipulation that all objections are reserved save as to the form of the questions?

Mr. Wright: Yes.

Mr. Mellin: And may it be stipulated that if the witness is instructed not to answer, and he refuses to answer that it may be deemed that the notary has read him the question and instructed him to answer, and that the witness was directed by the notary to

* Page numbers appearing at top of page of Original Deposition.

Defendant's Exhibit M—(Continued)
 (Deposition of Spencer A. Earnshaw.)
 appear before the United States District Court at
 a time convenient to the court on a motion of the
 defendant-counterclaimant to compel him to an-
 swer.

Mr. Wright: So stipulated.

Direct Examination

Q. (By Mr. Mellin): Will you state your full
 name, Mr. Earnshaw?

A. Spencer Arnold Earnshaw.

Q. Where do you reside, Mr. Earnshaw?

A. 132 East 77th Street, Los Angeles, Zone 3.

Q. How long have you lived there, Mr. Earn-
 shaw?

A. A little over 10 years at that one address.

Q. Did you live in Los Angeles prior to that
 time? [2]

A. Across the street, 143 East 77th.

Q. How long did you live there, approximately?

A. Oh, approximately 20 years.

Q. What is your occupation?

A. I was a plasterer at one time.

Q. You were a plasterer. Did you change your
 occupation? A. I quit plastering in '47.

Q. 1947? A. Yes, sir.

Q. What has been your occupation since that
 time?

A. I haven't had any occupation since.

* * * * *

Q. What occupations had you had before be-

Defendant's Exhibit M—(Continued)
(Deposition of Spencer A. Earnshaw.)

coming a plasterer, or had you been a plasterer for many years?

A. I think I was initiated in the Union about '23.

Q. 1923? A. That's right.

* * * * *

Q. Did you have anything to do with the manufacturing of concrete pipe during that period?

A. No, I didn't. [3]

* * * * *

Q. Now, you are the Spencer A. Earnshaw who is the patentee of Patent 2168329, which I show you? A. Yes.

Q. It is dated 1939. I will offer a copy of that for identification as American Pipe Exhibit 1 to the Earnshaw deposition.

(The instrument in question was marked by the Notary Public as American Pipe Exhibit 1 for identification (Earnshaw), and thereupon returned to counsel.) [4]

* * * * *

Q. But its primary purpose was to plaster walls, wasn't it?

A. That was one of the purposes, yes.

Q. I read from the patent and ask you if it isn't a correct statement: "A further object of the invention is to provide an apparatus adapted for handling plastics or fluids and applying such material to wall, ceiling, or other portion of build-

Defendant's Exhibit M—(Continued)
(Deposition of Spencer A. Earnshaw.)
ing or structure.” That’s what you had in mind originally for it, wasn’t it?

A. Well, I will quote what the conversation was between the patent lawyer and myself. He said——

Q. Let’s answer the question, Mr. Earnshaw; it will save a lot of time.

A. He said, “What do you want to do with this, Mr. Earnshaw?” And I said, “If you make a list of some of the things we can do with it, it will be about three [5] miles long.”

Q. But originally you had in mind a machine that had at least one function which was to plaster walls; isn’t that correct?

A. That’s the idea, yes.

Q. And you had the machine adapted so that you could feed the material at different heights to go along a vertical wall?

A. I imagine it has that movement in there, yes.

Q. You imagine? Don’t you know?

A. Well, I know it does.

Q. Now, did you ever build a machine such as is shown in that patent?

A. I built a model that was taken over to the American Pipe at one time. I had a fellow build it for me. I am a very poor mechanic myself. It was a homemade construction affair. It consisted of a belt, about eight feet from pulley to pulley, 16 inches wide. It had a roller on it. It was on wheels that swiveled, and you could tilt it by—the

Defendant's Exhibit M—(Continued)

(Deposition of Spencer A. Earnshaw.)

motor was almost a perfect balance for it so that it would tilt up and down.

Q. That is, the feed end or the discharge end of the belt, you could feed it up and down?

A. Yes, you could raise and lower the belt—well, there was a wheel on there. We had a gear in it. By taking ahold of this wheel, with the almost perfect balance of the [6] belt you could guide the belt up and down for different heights.

Q. Now, the material was fed to the point of application by means of a belt on that machine, wasn't it?

A. The material was given the velocity of the belt, and it was thrown from the belt to where it was to be put.

Q. By the velocity of the belt?

A. That's right.

Q. In other words, the material was discharged onto the belt and the belt conveyed it along and threw it onto the wall or whatever else you were plastering?

A. Yes.

Q. How did you control the thickness of application? [7]

* * * * *

Q. And the material was deposited on the belt and then traveled along the belt and obtained its velocity and then was placed on the wall from the belt—thrown on the wall from the belt?

A. That is correct.

Q. At the end of the belt. How did you con-

Defendant's Exhibit M—(Continued)

(Deposition of Spencer A. Earnshaw.)

trol the thickness of the application of that material on the wall?

A. By the movement of the belt.

Q. Was that moved manually?

A. Yes, at that time. [8]

* * * * *

Q. Actually in the machine the material is fed between the two belts and travels along with the belts, doesn't it, regardless of what else it does; it is fed between the two belts, 73 and 46?

A. Yes, the material is fed between the two surfaces.

Q. Then it travels along belt 46 till it gets to the end or the semicircular end of the belt? [9]

A. Where it is thrown by the centrifugal action of the belt coming around the circle.

Q. In other words, it would be thrown off approximately where the numeral 47 is indicated?

A. According to the speed of the belt. Belts will have a certain action, and when you put material on something, it isn't going to come off, especially if it has an adhesion, unless you create some way of getting it off either by gravity or by motion, or something. So the centrifugal action of the roller underneath the belt pulls the belt from the material.

Q. And lets the material project forwardly in the line of the belt? A. That's right.

Q. While the belt goes down underneath the material? A. That's right.

Defendant's Exhibit M—(Continued)
(Deposition of Spencer A. Earnshaw.)

Q. Now we get back to the question I asked you. At the discharge end of the machine you didn't provide two circular rollers or drums between which the material was discharged directly to the object to be plastered?

A. Not in this patent, I don't believe.

Q. What were those belts made of, Mr. Earnshaw, in that patent?

A. I have used various kinds of belts. I first manufactured my own with clothesline rope and string. Then [10] I took a piece of canvas and sewed that together. Then I took a piece of old, red innertube out of an automobile, and I sewed that together.

Q. In other words, you made rubber belts for those machines?

A. I wouldn't say that the string and the clothesline was rubber.

Q. How about the red innertube?

A. The red innertube was rubber, yes.

* * * * *

Q. Then it was within your range of knowledge at the time that you conceived the machine shown in that early patent of 1939 that you could use rubber belts, if you wished, in it?

A. I was trying to find the very best kind of a belt there was. There was all kinds of belts. I understand there has been all kinds of belts on the market. This patent has been in effect for some years, and just what belts have been available

Defendant's Exhibit M—(Continued)

(Deposition of Spencer A. Earnshaw.)

at that time and what belts are [11] available now, I guess there is quite a difference.

* * * * *

Q. You haven't answered my question yet. What I asked you is this: You had in mind all during that time that you could use belts of any material that were satisfactory for the purpose.

A. If I could find a belt that would be satisfactory, that's what I was intending to use, yes.

Q. And you knew at that time that rubberized or rubber-coated belts were common; isn't that a fact?

A. Yes, there was rubber belts on the market.

Q. Now, you talked about this model that you have. Where is that model now? [12]

A. I have it. It's at my place.

Q. Is it in condition to demonstrate what you show in your early patent?

A. Like I say, it's just a belt. I don't know whether the belt has deteriorated with age. I had a one-horsepower motor I was working with there on it. I don't know whether the deterioration of the belt would be so that we could drive it or not. We could see it, though, if you want to look at it.

Q. What material is the belt on that machine made of?

A. I believe it's a four-ply rubber impregnated canvas with about a sixteenth of an inch of rubber possibly on the surface of it.

Defendant's Exhibit M—(Continued)

(Deposition of Spencer A. Earnshaw.)

Q. When did you make that model, approximately?

A. I think it was in about '42.

Q. Somewhere in that area, the area of the year 1942?

A. Yes. [13]

* * * * *

Q. During the time that you were talking about the agreement with Howard Jenkins and Bill Whitling, did they take you out into the yard of American Pipe?

A. Yes, I have been in the American Pipe yard twice. I was in there last week, Wednesday, and then Mr. Jenkins, H. H. Jenkins, and I went out into the yard and we seemed to go along a building right in from the gate there a ways, and there was a machine sitting there; it was called a Gillespie machine; I'm quite sure it was a Gillespie inside lining machine; and Mr. Jenkins showed me that. Then we walked back and around. They were sand blasting—I believe it was shot blasting some steel pipe. There was a colored boy sitting there with a nozzle, and he was shot blasting some pipe there, and it was pretty good-size pipe, maybe four-foot diameter, I believe. And then we got over to this machine and there was some wire brushes there, two wire brushes, and I noticed they were very much grooved out, and they seemed to be kind of a very coarse wire to me. The wire was—let's see—about the size of a lead pencil, I imagine, or close to that size, as I recall it, and they [19]

Defendant's Exhibit M—(Continued)

(Deposition of Spencer A. Earnshaw.)

seemed to be very much grooved out, and it looked to me like as if——

* * * * *

Q. (By Mr. Mellin): You were talking about the wire brushes.

A. They were coating a pipe there, and the coating was put—there was a hopper that was on a structure pretty close to the ground. It was full of material, so I don't know just what the means was of getting the material out of there; but I noticed it kind of slid down. Then these two brushes was riding on this frame on wheels and there was a cable that pulled it, and the material was thrown——

Q. The cable pulled the machine along the pipe?

A. Yes.

Q. The pipe was rotating? [20]

* * * * *

Q. In that early machine that you saw the first time you were out there, it had two counterrotating brushes and the material was fed from behind between those brushes? A. That's right.

Q. As far as the feeding is concerned, it was very much like the machine you saw the other day?

A. Very much, I guess, in the same——

Q. The difference between the machines was, the machine you saw the other day had rubber-covered brushes or rollers, and the machine you saw earlier had these wire brushes that you speak of?

Defendant's Exhibit M—(Continued)
(Deposition of Spencer A. Earnshaw.)

A. Yes, the machine we saw the other day, there was a difference in the way of it. You take a series of points of wire sticking out; you don't push a piece of wire straight back in; it doesn't yield straight back towards the center; it stays there. You can push it over to a side like you can push your finger; but you can't push it down. If you have a particle of material that goes to get on that surface there, there is no surface for it to get onto. You see what I mean?

* * * * *

Q. You saw a machine out there the other day that was using wire brushes, didn't you?

A. Yes.

Q. Was that substantially like the machine that you saw the first time you were out there?

A. This one the other day, the wires, I believe, were a little bit finer. [22]

Q. But other than that, the machine was substantially the same as that which you—

A. I had the impression in 1944, I think it was, when I was in the yard, that the brush was all made in one unit.

Q. You didn't know if that was a fact or not?

A. I didn't know.

Q. That is, the wire brush?

A. That's right.

Q. Did you say, Mr. Earnshaw, that the wire brush doesn't operate satisfactorily, or you noticed that at the time?

Defendant's Exhibit M—(Continued)
(Deposition of Spencer A. Earnshaw.)

A. From my experience the wire brush may operate satisfactorily for some purposes. But the wear and tear and the way it acts, the way I imagine it acts, I wouldn't say it would suit me on all occasions. It has its purposes.

Q. You said, from your experience. What experience have you had with wire brushes?

A. I haven't had but very little experience with wire brushes.

Q. So what you are speaking of now is your opinion or your theory of the matter?

A. That's right. [23]

* * * * *

Q. Now, you are able to read drawings to some degree, aren't you, if they are in connection with machines of this character, Mr. Earnshaw?

A. Yes, I understand a little about drawings.

Q. All right, I will show you a copy of Patent No. 2380499, dated July 31, 1945, issued to W. R. Brend, and I will ask you if that generally does not illustrate the machine that you saw at the plant in 1943 or 1944 before you entered the contract with American Pipe?

A. When I saw the machine, I could see quite a bit of the brush. I don't remember all this housing around the front part of it here (indicating).

Q. In other words, that shield may have been shorter than shown in Figure 2?

A. It may have been shorter.

Defendant's Exhibit M—(Continued)
(Deposition of Spencer A. Earnshaw.)

Q. The shield that you are referring to I will identify as "shield" on this. That is correct. Those were shorter to some degree.

A. I don't recall the shield at all, like I don't recall the shield on this machine the other day; I saw quite a bit of the brush the other day, and I don't recall a shield on there.

Q. Let's go to Figure 2 to the right. The material is fed tangently into between the rollers; that is the [24] way it was fed into the machine that you saw in 1943 or 1944?

A. I didn't see the back part of this machine.

Q. You knew the material came in between the brushes?

A. I knew the material was produced into the brushes, yes.

Q. Leaving out the minute details of construction, in general that Brend patent shows the general elements of the machine that you saw in 1943 or 1944, isn't that correct, at American Pipe?

A. I guess that would be correct. [25]

* * * * *

Q. Now, at the time that you saw this early machine with Mr. Jenkins out in the yard that used the wire brushes, as you testified to, did you at that time tell Mr. Jenkins you expected royalties on that machine when it used wire brushes?

A. Ask me that question again.

Mr. Mellin: Read it to him, will you?

(The question was read by the reporter.)

Defendant's Exhibit M—(Continued)
(Deposition of Spencer A. Earnshaw.)

The Witness: No, I didn't discuss royalties about the [37] Lock Joint machine.

Q. In other words, you don't contend here that you are entitled to royalties on the machine that you saw the other day where it uses wire brushes instead of rubber brushes?

A. No, I am not entitled to use the wire brushes. The wire brush is a patent by somebody else. [38]
* * * * *

Q. I hand you copies of Patents 2639943, 263-9942, and 2681725. Are those the patents that you are referring to?

A. This (indicating) is the one I was referring to.

Mr. Mellin: The one the witness identifies is Patent No. 2639943. [43]

Q. That's the one you referred to as, I think, to use something of your words, "covers the rubber-covered rollers or brushes"?

A. What were the words you just used?

Mr. Mellin: Read it to him. Don't let me put words in your mouth. You just use your own words.

(The question was read by the reporter.)

The Witness: I have been referring to my patent as rubber rollers. [44]
* * * * *

Q. Are there any other advantages in using rubber in lieu of wire brushes?

A. The wear on them. I believe that the wear

Defendant's Exhibit M—(Continued)

(Deposition of Spencer A. Earnshaw.)

on the rubber is less than what it would be on the wire.

Q. Any other advantages?

A. The cost. I don't know about the cost of the wire brush, but I believe the cost of the rubber would be less than what the wire cost. [52]

* * * * *

A. The rubber still has the resilient advantage that I claim for it; but if you are going to allow the rubber to be put together in such a fashion that it will hang onto particles, that's something I don't know about.

Q. Then you wouldn't have any complaint as to the way American is using their rollers, would you?

A. If the rubber bends and yields and grips the material between two surfaces, then I think that there is an infringement. [54]

* * * * *

Q. Let's get back to the question. I will get an answer to the question if I have to stay here all afternoon. Read him the question.

(The question was read by the reporter.)

Q. (By Mr. Mellin): In other words, all of those features that you previously mentioned of having the machine to change its angles and to coat vertically, and all of those things, they don't use those features?

A. The features they use now is the yielding of the rubber against the material and gripping the material and throwing it, the feature that they use,

Defendant's Exhibit M—(Continued)
(Deposition of Spencer A. Earnshaw.)
and the driving of the rollers. Now, you can drive rollers faster than you can belts because they won't explode. Belts will explode, but rollers will not explode.

Q. Now, in your Patent 2639943 you had in mind at that time that you could use either wire brushes for the drums 12 and 13 or rubber-coated brushes; isn't that correct?

A. In this one place here I say wire brushes could be used in this device because it gives an advantage of more than one stream. [56]

* * * * *

Q. Now, as I just gathered from your testimony, the only complaint that you have of the present American machine [58] that you witnessed the other day is that they use rubber rollers for discharging materials instead of wire brushes; is that correct?

A. Read that to me, will you.

(The question was read by the reporter.)

The Witness: That's right. They adapted—they took out the wire brushes and they have adapted the rubber roller to fit in the place of the wire brush.

Q. (By Mr. Mellin): Now, would it make any difference to you whether those rollers had smooth exteriors or were treaded, as you call it?

A. I have claimed for both ways.

Q. So it wouldn't make any difference?

A. As far as the patent is concerned, if they use

Defendant's Exhibit M—(Continued)

(Deposition of Spencer A. Earnshaw.)

rubber of any kind they are infringing on this patent because they are projecting material from between——

Q. Two rubber surfaces?

A. The rubber surface.

Q. And it wouldn't make any difference whether they were smooth rollers, that is, smooth on their periphery, or whether they were treaded?

A. I have claims giving me the ridges and the grooves.

Q. I am not talking about your claims. The court will interpret the patents. I am asking what you are complaining of, that is, your understanding of it? [59]

A. My understanding of it is that I own in my patent here, I own the use of rubber surface or rubber rollers for throwing material.

Q. Now, have you ever performed any tests or any experimental work to determine whether a smooth rubber roller would function in this regard?

A. I have thrown material with smooth rubber.

Q. Did you test the life quality of it?

A. I have never had what you call a real smooth roller large enough. I have had rollers, but I have never had one large enough to handle materials of this nature and test it. I have had it semi, almost smooth, but not quite smooth. They have little grooves in it. Like I say, I tried to use the product cheapest to my pocketbook. I used war surplus products. There were some grooves and

Defendant's Exhibit M—(Continued)

(Deposition of Spencer A. Earnshaw.)

I shaved them down with a razor and tried to bring them down smooth. Then I have made little cuts in them, and different things like that.

Q. From your experience, would you say there was any difference in the wearing qualities of rubber rollers whether they were treaded or whether they were smooth?

A. Well, the only wear that I have is what is natural. When you feed material between two surfaces, it's a natural thing for material to get in there and have abrasion. Rubber is the most resistant to abrasion that I know of.

Q. Have you made any tests to show that it is a fact [60] that if the rubber roller is made smooth, that its wearing qualities are considerably less than the wearing qualities of wire brushes?

A. I haven't compared—I haven't thrown any material with a wire brush, so I have not had experience with wire brushes, except what I have seen at the yard there. * * * * *

Q. Is there any degree of resiliency of that rubber roller necessary to perform these functions that you claim for rubber?

A. That's something that I am allowed, I believe, in my patent, to have various kinds of rubber, whatever rubber can be produced, or whatever resilient material can be produced that would do the job as I want it done, and at the most efficient cost, I think that would be what I am entitled to have. [61]

Defendant's Exhibit M—(Continued)

(Deposition of Spencer A. Earnshaw.)

Q. In other words, you believe you are entitled, and that's the basis of your complaint, to a monopoly on the idea of using rubber of any degree of hardness in lieu of wire brushes in these machines?

A. I believe so, yes.

* * * * *

Q. Would you say that substituting the rubber brushes [62] for the wire brushes in the Brend machine was an improvement on the Brend machine?

A. I have heard that American Pipe quit using wire brushes about seven years ago, somewhere around '48, and the reason they quit was because it was less expensive to use the rubber roller compared to the wire brush.

Q. And would you consider that to be an improvement on the Brend machine, that substitution?

A. The cost of producing an item, I guess, is very important.

Q. Let's answer the question. Would you consider the substitution of rubber brushes for the wire brushes to be an improvement on the Brend machine?

A. I would consider it an infringement on my patent.

Q. I am not asking whether you consider it an infringement.

A. That's what I consider. I consider that they are infringing my patent when they introduced the rubber rollers into the Brend machine.

Defendant's Exhibit M—(Continued)
(Deposition of Spencer A. Earnshaw.)

Q. I think we understand your position rather thoroughly in that regard. I am asking you, is the substitution of rubber brushes for wire brushes in the Brend machine an improvement in the Brend machine? [63]

* * * * *

Q. Now will you answer my question: Did the substitution of the rubber rollers for the wire brushes in the Brend machine improve the Brend machine, in your opinion?

A. Well, I don't know.

Q. You don't know whether it improved it or not?

A. I don't. But according to cost, and according to what Mr. Jenkins made this proposition to me, he could save [64] money by using the rubber in preference to the wire.

Q. Who told you that?

A. Mr. Jenkins.

Q. Which Jenkins? A. H. H. Jenkins.

Q. When did he tell you that?

A. After I had shown him my patent, this patent No. 2639943.

* * * * *

Q. Now, in your Complaint, Paragraph VII toward the bottom, you state, "That said agreement further provides that if either plaintiff or defendant invents any improvements on the processes and methods of Patent No. 2168329, which, in the judgment of defendant are applicable to the manufac-

Defendant's Exhibit M—(Continued)

(Deposition of Spencer A. Earnshaw.)

ture of lining or coating of pipe, that said improvement shall inure to the benefit of both parties on the terms set forth in said agreement, and that defendant would pay the costs of patenting the same; that plaintiff invented and received patents on improvements to the process and methods of said patent, but defendant did not pay the costs [65] of patenting the same, although defendant has had the use and benefit thereof." You recall reading that when you signed the Complaint?

A. Yes.

Q. Now, what patents did you specifically have in mind there; these improvement patents, Mr. Earnshaw, the three in front of you?

A. This one here I have in mind (indicating).

Q. That's No. 2639943.

A. This up-and-down method, where they coated their pipe, even though they had the wire brushes in, they used the elevator to raise and lower it. I have the elevator in my patent.

Q. What elevator are you referring to that they use?

A. They have a machine there that they raise and lower. A man rides on it. It's rather a huge machine, and they feed material—I have never been up close to the machine, but they throw material on pipe that stands on end.

Q. Out at American?

A. Yes. So they have had the use of this elevator method since I explained it to them.

Defendant's Exhibit M—(Continued)
(Deposition of Spencer A. Earnshaw.)

Q. You had the elevator method in a sense in your first patent, didn't you, your 1939 patent?

A. Not in the same sense, no. When you raise a belt up, you are starting from a pivot point and it goes up at [66] an angle. This machine was built to strike a surface at right angles at various heights, and that makes a difference. It also says that you can strike a surface at different angles from various heights.

Q. So that is one patent that you say that we have used the improvements. You have two other patents. Referring to '942, does American use any of the things disclosed in that patent?

A. Yes, American is using this method here. This is a rubber-surface roller that's on the belt.

Q. You already have a rubber-surface roller in '943. Do you have it again in '942?

A. We have it on the belt right here (indicating).

Q. On the belt?

A. Yes, we have a rubber surface roller on the belt there.

Q. That's the only similarity between what is shown in that patent and what American does?

A. We have the ridges on the rubber. That is similar—

Q. That's in the '943 patent? A. Yes.

Q. Let's stay with '942. What other things does American use in '942 outside of the rubber belt?

Defendant's Exhibit M—(Continued)
(Deposition of Spencer A. Earnshaw.)

A. The rubber roller on the belt—well, it's a multiple number of units put together to make a roller. That's what they do in their—they put the units together [67] to make up a roller. That's what I have done in this case, and I have done it in this case (indicating).

Q. Is there any difference between putting wire brush units together to make up a roller and putting rubber units together to make up a roller?

A. Well, I have never seen the rubber brush put together in units.

Q. You did see the wire brush put together in units as early as 1944, didn't you?

A. I didn't know it was put together as units. I thought it was all one unit.

Mr. Brown: Are we talking about the right patent? You said " '942."

Mr. Mellin: Yes; he referred to that and said, as I recall his testimony, that what we used of that—

The Witness: No, wait a minute. This is '942. We have got the wrong one. This is '25.

Q. (By Mr. Mellin): This is 2681725. What does American use that's shown in that patent?

A. Like I say, they use this rubber roller that's on the belt here. It's put together in units. That's a rubber-surface roller, and it grips material. Now, that gives material velocity, that roller on that belt gives material velocity, and it is rubber.

Q. The only thing you complain of in that pat-

Defendant's Exhibit M—(Continued)

(Deposition of Spencer A. Earnshaw.)

ent, which is '942, the last three numbers, is that American uses [68] a stack of rubber brushes in lieu of one solid rubber roller?

A. This here patent is an improvement on the original belt patent in effect in that it can be raised or lowered to strike the surface at different angles, and it is an improvement on the belt patent from those various improvements that it has, and therefore, it was agreed to be paid for by American if I made any improvements in a belt machine; and this is a belt machine.

* * * * *

Q. What do they use of Patent '942?

A. Well, this elevation method, where they have introduced the brushes in the elevator for coating of pipe that stand on end.

Q. You have that in '943, too, haven't you?

A. I have the elevator in all of those. [69]

Q. In all of your patents? A. Yes. [70]

* * * * *

/s/ SPENCER A. EARNSHAW,
(Signature of the Witness.)

Subscribed and sworn to before me this 20th day of February, 1957.

[Seal] /s/ J. BEMENT,
Notary Public in and for the County of Los Angeles, State of California. [74]

Defendant's Exhibit M—(Continued)
(Deposition of Spencer A. Earnshaw.)

State of California,
County of Los Angeles—ss.

I, Ben A. Bell, C.S.R., a Notary Public within and for the County of Los Angeles and State of California, do hereby certify;

That prior to being examined, Spencer A. Earnshaw, the witness named in the foregoing deposition was by me duly sworn to testify the truth, the whole truth and nothing but the truth;

That said deposition was taken before me pursuant to stipulation, at the time and place therein set forth, and was taken down by me in shorthand and thereafter transcribed into typewriting under my direction and supervision;

That it was stipulated by counsel that said deposition may be read, corrected and signed by the witness before any notary public in and for the County of Los Angeles, State of California.

I further certify that I am neither counsel for nor related to any party to said action, nor in anywise interested in the outcome thereof.

In Witness Whereof, I have hereunto subscribed my name and affixed my seal, this 22nd day of March, 1957.

[Seal] /s/ BEN A. BELL,
Notary Public in and for the County of Los Angeles, State of California. [75]

[Endorsed]: Filed March 22, 1957.

DEFENDANT'S EXHIBIT "N"

[Title of District Court and Cause.]

DEPOSITION OF HUGH FOSTER
KENNISON

Deposition of Hugh Foster Kennison, taken on behalf of the defendant and Counterclaimant, pursuant to the attached notice, before Francis H. Bremer, Certified Shorthand Reporter and Notary Public, in and for the State of New Jersey, at Room 934, 24 Commerce Street, Newark, New Jersey, at 10:00 o'clock a.m., Tuesday, March 19, 1957.

Appearances: Mellin, Hanscom & Hursh, Attorneys for defendant, by Oscar A. Mellin. [1]*

HUGH FOSTER KENNISON

called and sworn on behalf of the defendant, testified as follows:

Direct Examination

Q. (By Mr. Mellin): Will you give your name in full, your residence address and your age?

A. Hugh Foster Kennison, Avon Drive, Essex Fells, New Jersey, age 40.

Q. And what is generally your training; I mean, are you an engineer?

A. Yes, I am a civil engineer, graduate of M.I.T. in 1939.

Q. And what is your occupation?

A. I am engineer for Lock Joint Pipe Company.

* Page numbers appearing at top of page of Original Deposition.

Defendant's Exhibit N—(Continued)
(Deposition of Hugh Foster Kennison.)

Q. And what is their address?

A. 150 Rutledge Avenue, East Orange, New Jersey.

Q. And what is their business, generally?

A. Their business is the manufacture of reinforced concrete pipe, which also includes pre-stressed pipe, mainly for water supply use.

Q. Will you state whether or not during the past years you have manufactured any pipe by a process which includes the spraying of a cementitious material on a steel pipe?

A. I presume you mean on a pipe with steel in it.

Q. Yes.

A. Yes, all of our pre-stressed pipe manufactured in certain sizes uses a sprayed-on mortar, cement mortar coating. This probably represents, in total, several thousand miles of pipe. [2]

Q. And then it becomes a sort of a steel core and a cement coating on the outside, or cement-mortar coating?

A. Yes.

Q. When did you first build a machine for spraying pipe of that character, if you know?

A. In 1940 and approximately '41.

Q. By the way, how long have you been with Lock Joint Pipe Company?

A. Since 1939.

Q. At that time, or sometime thereafter, did Lock Joint Pipe Company manufacture a machine now known as the Brend Machine?

A. Yes.

Q. I show you a drawing numbered B-1-413,

Defendant's Exhibit N—(Continued)

(Deposition of Hugh Foster Kennison.)

dated January 23, 1942. Are you familiar with that drawing? A. Yes.

Q. And what does that drawing depict, just generally?

A. This is a profile of the Brend type coating machine through the worm and brush housing assembly.

Q. And I show you a second drawing numbered B-1-418, dated February 24, 1942. Do you recognize that drawing?

A. Yes, this is the same machine, but a vertical view, and sectional view, of the brush assembly and brush mounting.

Q. And where it says, "Osborn Masterwheel Brushes 10" Dia., No. 152-25," is that what you are terming the brush of the machine?

A. Yes. [3]

Q. Is that in one unit or is it made up of a number of brushes?

A. It is made up of a number of brushes.

Q. Arranged axially and bolted together?

A. Yes.

Q. And I show you a third drawing, labeled B-1-413A, dated May 14, 1943. What is that?

A. This is a revision of the original drawing, B-1-413, with some minor technical revisions relating to wheel assembly, and so forth.

Q. When was that machine built that was depicted on these drawings, to your knowledge?

A. This machine was built just after these draw-

Defendant's Exhibit N—(Continued)

(Deposition of Hugh Foster Kennison.)

ings were dated, and prior to the latter part of 1942.

Q. And these drawings were made at the time, to your knowledge, the time that they were dated, or completed at that time? A. Yes.

Q. And you brought them here from the files of the Lock Joint Company, did you? A. Yes.

Q. Now, I show you a copy of the Brend Patent, No. 2,380,499, which was heretofore identified in this litigation as American Pipe Exhibit 2 to the Earnshaw deposition. Do you recognize the machine depicted in that patent? A. Yes.

Q. And is or is not that the machine that is illustrated in the drawings to which you have just testified? [4]

A. Basically, it is the same machine.

Q. Is there any substantial difference at all, except in dimensions of parts?

A. There is a slight difference in the mounting, the drive of the brushes. In this patent it is pictured being driven by one motor. I believe in this machine, although it may not be shown—

Q. You mean the machine in the drawings, B-1-413, B-1-418 and B-1-413A?

A. Particularly the revised drawing, B-1-413A—the drive is a little different, but essentially the same, for the brushes.

Q. The brush operation of spraying the pipe is the same or different? A. It is identical.

Defendant's Exhibit N—(Continued)
(Deposition of Hugh Foster Kennison.)

Q. And those brushes, how were they made in the machine that you manufactured at the time?

A. We purchased Osborn brushes. And this number you referred to is their manufacturing number.

Q. That is that 152-25? A. Yes.

Q. And they are still wire brushes, are they?

A. Yes, pre-mounted in the hubs. And the picture illustrates the use of five brushes per roll.

Q. Those were counter-rotating brushes, as shown in the patent that we have just mentioned, No. 2,380,499? A. Yes.

Mr. Mellin: At this time I will offer drawing B-1-413, B-1-418 and B-1-413A in evidence as American [5] Pipe Exhibits to the Kennison deposition 1, 2 and 3.

And I will offer a copy of the Brend Patent, No. 2,380,499 as American Pipe Exhibit 4 to the Kennison deposition.

(Marked Kennison Deposition American Pipe Company Exhibits 1, 2, 3 and 4 for identification.)

Q. Would you state whether or not the wire brushes operated successfully to spray the concrete on pipe in the machines you built in late '42 and '43? A. Yes.

Q. And at that time did you try any brushes of any different construction, that time or later?

A. At that time we tried different brushes of various wire brush manufacturers to get better life.

Defendant's Exhibit N—(Continued)
(Deposition of Hugh Foster Kennison.)

Q. What do you mean by better life, Mr. Kennison?

A. Longer usage per dollar cost of brush. That is, we investigated some very high quality brushes, very expensive brushes, on the assumption that we would get more yardage through the machine before the brushes were worn out.

Q. And at that time or thereafter did you try brushes of any other material, other than wire?

A. At a later period we tried brushes of rubber.

Q. And that was about when, as you recall?

A. Early to the middle part of 1946.

Q. Now, I show you what purports to be a drawing on the drawing paper of Lock Joint Pipe Company, which is dated [6] 5-21-46, and ask you if you can identify it.

A. Yes, this illustrates one of the rubber brushes that was used on the machines.

Q. And that was used in lieu of the brushes illustrated on drawing B-1-418?

A. Yes, this was a direct replacement on that machine.

Q. And would you briefly describe the rubber brush shown in this drawing, which you have just identified, that is, the drawing dated 5-21-46?

A. This was a steel drum in which a one inch thick rubber layer was placed around its periphery.

Q. Was that vulcanized on or not?

A. Yes, it was vulcanized on by the Manhattan

Defendant's Exhibit N—(Continued)
(Deposition of Hugh Foster Kennison.)
Rubber Company. And we grooved it, as shown,
with a tire-grooving machine.

Q. That was grooved longitudinally, as illustrated in this drawing? A. Yes.

Q. And do you know whether those brushes were actually made?

A. They were actually made and were used.

Mr. Mellin: I will offer the photostatic copy of the drawing in evidence as American Pipe Exhibit 5 to the Kennison deposition.

(Marked Kennison Deposition American Pipe Company Exhibit 5 for identification.)

Q. I notice this is a photostat of a drawing, rather than the original. Can you explain that?

A. In the [7] past few days we have tried to locate the original. Since it was not given a drawing number, those drawings have been kept in a miscellaneous file drawer as sketches. We were not able to locate the original.

Q. I notice on here there is noted the notation, "Attention W. L. White." Do you recognize that printing?

A. Yes, this is my own handwriting. And this drawing was transmitted to Manhattan Rubber. Mr. W. L. White at that time was, and I believe still is, employed by Manhattan.

Q. I hand you a carbon copy of a letter addressed to Manhattan Rubber Company, Passaic, New Jersey, attention W. L. White, dated May 21, 1946. What is that letter?

Defendant's Exhibit N—(Continued)
(Deposition of Hugh Foster Kennison.)

A. This is a letter that I wrote transmitting the sketch.

Q. Exhibit 5?

A. Exhibit 5. To the Manhattan Rubber Company. This is the basis of their work in putting the rubber covering on our steel drum, which we manufactured.

Q. In other words, to fabricate the rollers shown in Exhibit 5? A. Yes.

Q. And this carbon copy of the letter came out of your files? A. Yes.

Mr. Mellin: I will offer that in evidence as American Pipe Exhibit 6 to the Kennison deposition.

(Marked Kennison Deposition American Pipe Company Exhibit 6 for identification.)

Q. Did you give them an order at that time to [8] manufacture it?

A. Yes, we gave them an order, Order No. 2259. That is Lock Joint Pipe Company purchase order.

Q. And you have with you a photograph of that order? A. Yes.

Q. Would you explain why it is a photograph rather than the original order?

A. Several years ago all of our records were put on microfilm. This is a photograph from that microfilm record.

Q. And the originals were destroyed, were they?

A. Yes, the originals were destroyed.

Q. And is that the order for them to produce

Defendant's Exhibit N—(Continued)

(Deposition of Hugh Foster Kennison.)

the device shown in Exhibit 5, the rubber-covered drum that had grooves in it?

A. Yes, it speaks of 2 steel tubes to be rubber coated 8" O.D. by 8" long.

Q. Did you subsequently receive the original of the order that was sent to Manhattan?

A. Yes.

Q. And this the one that I have in my hand?

A. Yes.

Q. And that is the original of the order which was photographed, which you just produced?

A. From our files, yes.

Q. And you obtained that from Manhattan Rubber Company recently?

A. Recently, just before they were going to destroy their order.

Mr. Mellin: I will offer the original of that [9] order, 2259, in evidence as American Exhibit 7 to the Kennison deposition.

(Marked Kennison Deposition American Pipe Company Exhibit 7 for identification.)

Mr. Mellin: And I will offer the photograph of the copy of the order which was in the hands of Lock Joint Pipe Company as American Exhibit 8 to the Kennison deposition.

(Marked Kennison Deposition American Pipe Company Exhibit 8 for identification.)

Q. I show you a document which states, "2 sleeves to cover metal cylinders," and ask you if

Defendant's Exhibit N—(Continued)

(Deposition of Hugh Foster Kennison.)

that was likewise received from Manhattan Rubber Company?

A. Yes, we obtained it from Manhattan relative to the rubber brushes.

Q. Relative to the same transactions that we have been referring to? A. Yes.

Mr. Mellin: I will offer that as American Exhibit 9 to the Kennison deposition.

(Marked Kennison Deposition American Pipe Company Exhibit 9 for identification.)

Q. Now, will you state whether or not those rubber-covered drums were or were not actually built about at the time that we are speaking of in '46?

A. Yes, they were actually built, and they were returned to us, and we ran—or produced some pipe with those brushes on June 13 [10] and 14 of 1946.

Q. What became of the pipe, was it sold or destroyed, or stored?

A. Some of the pipe may have been—the coating may have been removed; other pipe, that were satisfactory, were actually sold.

Q. And those rubber brushes were installed on a machine substantially the same as the machine shown in the Brend Patent, Exhibit 4?

A. Yes, essentially the same, on a production machine.

Q. And they were substituted for the two wire brushes shown in Fig. 2 of that patent?

A. Yes.

Defendant's Exhibit N—(Continued)
(Deposition of Hugh Foster Kennison.)

Q. And for the same or a different function and purpose?

A. For exactly the same purpose.

Q. What results did you obtain from those brushes, the rubber-coated ones that you are speaking of?

A. We ran a pre-measured amount of mortar through them, and accurately measured the wear on each brush. This information was recorded and plotted to produce a wear curve.

Q. Do you have those with you? A. Yes.

Q. Are these the documents that I hand you now?

A. Yes, these are the originals, and there is a copy of them.

Q. And who were they made by?

A. The tests were made by myself.

Q. And these are in your own handwriting? [11]

A. Yes.

Mr. Mellin: I will offer the originals of those notes in evidence as American Exhibits 10 and 11 to the Kennison deposition.

(Marked Kennison Deposition American Pipe Company Exhibits 10 and 11 for identification.)

Q. I hand you a letter on the letterhead of Raybestos-Manhattan, Inc., dated June 10, 1946, which says this, in part, "We have shipped you under our Order 2725-CNY under date of June 5 the

Defendant's Exhibit N—(Continued)

(Deposition of Hugh Foster Kennison.)

rubber-covered steel drums which you sent us.”
What does that refer to?

A. This refers to the same rubber-covered drums we have been discussing and which were tested.

Q. That is, the ones shown on Exhibit 5, the sketch?
A. Yes.

Q. And those are the ones you actually used in the machine?
A. Yes.

Q. And what was the reason why you were testing rubber-coated drums in lieu of wire brushes, if there is a reason?

A. We were always looking for more economical means of producing pipes, and it was felt that rubber might have some advantage in this particular application.

Mr. Mellin: At this time I will offer the letter just identified by the witness in evidence as American Exhibit 12 to the Kennison deposition. [12]

(Marked Kennison Deposition American Pipe Company Exhibit 12 for identification.)

Q. And this letter of June 10th we have just been referring to came out of the Lock Joint files?

A. Yes.

Q. After you tested the rubber-coated brushes, as shown in Exhibit 5, as you have testified, what, if anything, did you do further in connection with rubber-coated brushes?

A. Well, the tests indicated that the brushes would be—or might be of advantage if we had

Defendant's Exhibit N—(Continued)

(Deposition of Hugh Foster Kennison.)

greater allowance for depth of wear. These brushes we have just talked about only allowed for about $\frac{1}{2}$ " of radial wear. So later that year, we designed a new housing in which we could put in rubber vanes. This housing is illustrated on drawing B-1-567, dated 8-15-46.

Q. That is the drawing we have in front of us?

A. Yes.

Q. Will you tell us more about that, please?

A. As you can see from the drawing, we were allowed here about an inch and a quarter wear.

Q. That is, radially?

A. Radial wear. We obtained some material from Manhattan, sheets of rubber, $\frac{1}{2}$ " thick by 5" wide, which we formed into the shape shown, the U-shaped vane.

Q. And I hand you what appears to be a photograph [13] of purchase order 3236. What is that?

A. This is the purchase order for that flat strip of rubber $\frac{1}{2}$ by 5, which we cut to special length and made the vanes similar to that illustrated on B-1-567.

Q. And the reason that you have a photograph of the order is because you have destroyed the records, you previously testified?

A. Yes, these are from our microfilm record.

Mr. Mellin: I will offer that in evidence as American Exhibit 13 to the Kennison deposition.

(Marked Kennison Deposition American Pipe Company Exhibit 13 for identification.)

Defendant's Exhibit N—(Continued)

(Deposition of Hugh Foster Kennison.)

Q. Go ahead, Mr. Kennison.

A. This rubber was used, but it had a very poor fit in forming it into a U-shape.

Q. That is, into the socket which held it?

A. Into the socket of the hub assembly. Pipe were made with this mechanism, but we found that due to centrifugal force, one leg of the extended U would extend and the other would come in, due to difference in weight of each of the arms of the U. As a result, this was redesigned. Drawing B-4-129, dated December 6, 1946, illustrates an extruded rubber shape for rubber vane coating brush. This was designed so that it could not be dislodged due to centrifugal force. And it was a pre-formed shape as [14] opposed to our earlier attempt at rubber vanes.

Q. Was that actually built?

A. This was actually built and used.

Q. And used on a Brend type of machine, of the type we have been discussing? A. Yes.

Q. And did it operate satisfactorily, except for wear, if it did not operate satisfactorily for that purpose?

A. It operated well enough to make several pipe. We did realize at that time, though, that again centrifugal force was stretching the rubber and we were getting some interference. At that time we discussed putting reinforced wire mesh in this extruded shape. But this was never actually tried.

Defendant's Exhibit N—(Continued)
(Deposition of Hugh Foster Kennison.)

Q. And approximately when were those brushes built and used, if you know, Mr. Kennison?

A. They were designed in December of '46, and tests were conducted sometime after that date, but prior to March of 1947.

Q. Now, I show you what appears to be a bill dated March 3, 1947, on the letterhead—or billhead of the Manhattan Rubber Manufacturing Division. Can you explain what that is for?

A. Yes, this is the bill from Manhattan to Lock Joint for the cost of the die and the curing form to produce the section described in drawing B-4-129.

Mr. Mellin: I will offer B-1-567 as American [15] Exhibit 14 to the Kennison deposition and B-4-129 as American Exhibit 15 to the Kennison deposition, and the copy of the bill of March 3, 1947, to which the witness testified, as American Exhibit 16 to the Kennison deposition.

(Marked Kennison Deposition American Pipe Company Exhibits 14, 15 and 16 for identification.)

Q. What was your ultimate conclusion, if you arrived at any, with respect to the use of rubber-coated drums of the types you have mentioned as compared with the wire brushes that you were using?

A. We felt that the cost of brush per cubic yard of mortar placed was more or less the same. At the same time, we were negotiating with several of the larger wire brush manufacturers for improved

Defendant's Exhibit N—(Continued)

(Deposition of Hugh Foster Kennison.)

quality and price reduction, due to our quantity use of the brushes. This negotiation with the wire brush people was successful, so we concluded our experiments on the presumption we could get cheaper placement of mortar by using steel brushes, as well as the fact that we felt the brush people could produce in the future cheaper and better brushes for this particular use.

Q. Was there any difference in function of actually spraying the concrete on the pipe as between the rubber brushes that you referred to and steel brushes?

A. No, they were more or less similar. [16]

Q. And one didn't spray the material any better or any faster than the other; is that what I understand by that answer?

A. Well, on some pipe we did notice that the rubber brush gave a slightly smoother coating. However, it had more rebound, that is, more mortar was thrown through the brushes, but did not land on the pipe, only on the floor. This was wasted and was contributing to the high cost of rubber brush per mortar placed on a pipe.

Q. Did you at any time have the experience, using the rubber brushes, of a piece of aggregate or larger piece of solid material going between the brushes?

A. Yes, occasionally hardened pieces of mortar would get mixed in with the mortar and be discharged through the brushes. With the rubber

Defendant's Exhibit N—(Continued)

(Deposition of Hugh Foster Kennison.)

brushes there was little clearance or flexibility and the rubber was chewed up, hunks of rubber removed from the brush.

Q. Did you ever have that happen with wire brushes? A. Yes.

Q. What happens?

A. The wire just parts, the material goes through and the wire is not damaged—the wire brush is not damaged.

Q. Now, ever since that time, that is, since 1946 or 1947 you have continuously used machines having brushes for this same function and purpose?

A. Yes.

Q. And, as I understand it, you have about 15 of [17] them with counter-rotating brushes in operation at this time. A. More or less.

Q. And they all use wire brushes, do they, or brushes of some other character?

A. They all use wire brushes. In the past few years, we have had a few with steel vanes, using a similar principle to that shown on drawing—

Q. B-1-567?

A. Yes, B-1-567. —excepting they are fixed steel fins, counter-rotating.

Q. Do they work satisfactorily or not?

A. They have been used on several jobs, but it is felt that the wire brush is more economical due to proper balance. The steel vanes have to be constantly kept in balance.

Defendant's Exhibit N—(Continued)
(Deposition of Hugh Foster Kennison.)

Q. Now, I hand you two photographs, and would you tell us what they depict, please?

A. These photographs were taken during 1942 or 1943 and illustrate the first use of the Brend Coating Machine for coating pipe on a water pipe line contract. This contract was for the City of Hyattsville, Maryland. The pipe plant was erected in or near Hyattsville. It is pre-stressed pipe, 30" diameter. It is recognized, and the job is of historical note, because it is the first pre-stressed pipe line built in this country.

Q. And that machine depicted in those photographs is substantially the same, except in minor details, with [18] the Brend Patent, which we have been referring to? A. Almost identical.

Mr. Mellin: I will offer those photographs in evidence as American Pipe Exhibits 17 and 18 to the Kennison deposition.

(Marked Kennison Deposition American Pipe Company Exhibits 17 and 18 for identification.)

Q. Are you familiar generally with the Earnshaw Patent, No. 2,168,329? A. Yes.

Q. And how did you become familiar with that, generally?

A. The Lock Joint Pipe Company has an agreement with Earnshaw for the use of a machine employing a belt feed for placing mortar on a pipe.

Defendant's Exhibit N—(Continued)
(Deposition of Hugh Foster Kennison.)

Q. And prior to August of 1956, did you ever build any such machine? A. No.

Q. That license agreement that you refer to, did that call for payment of unit royalty, if you know?

A. Yes, I believe there was an annual payment.

Q. If you used the machine, did it call for a royalty of so much per square foot?

A. Yes, so much per foot or square foot.

Q. Did you ever make any machines on which you paid royalties to Earnshaw? A. No.

Q. And you only paid him this hundred dollars a month minimum that you referred to?

A. Well, the [19] minimum, whatever it was.

Mr. Mellin: I will offer a copy of the Earnshaw patent just referred to in evidence as American Pipe Exhibit 19 to the Kennison deposition.

(Marked Kennison Deposition American Pipe Company Exhibit 19 for identification.)

Mr. Mellin: It is now 10:50, and there still has been no appearance from the other side, so we will close the deposition at this time.

3/21/57.

/s/ HUGH FOSTER KENNISON.

Certificate of Notary Public

I, Francis H. Bremer, a Notary Public and Certified Shorthand Reporter, do hereby certify that Hugh Foster Kennison appeared before me on the 19th day of March, 1957, at Room 934, 24 Com-

Defendant's Exhibit N—(Continued)

(Deposition of Hugh Foster Kennison.)

merce Street, Newark, New Jersey, having been duly sworn, made the foregoing deposition, and said deposition is a true record of the testimony given by the witness.

[Seal] /s/ FRANCIS H. BREMER,
Notary Public. My Commission Expires 12/28/58.

[Endorsed]: Filed March 25, 1957.

DEFENDANT'S EXHIBIT "S"

(Copy)

May 21, 1946.

Manhattan Rubber Company,
Passaic, New Jersey.

Attention: Mr. W. L. White.

Gentlemen:

In regard to our telephone conversation, you will find enclosed a sketch illustrating the rubber brushes for the coating machine. The two steel drums have been sent to your attention this afternoon, and if you will apply the 1" band of rubber as illustrated and vulcanized on to the steel tubing, we shall groove the band as illustrated.

If you have any further questions in regard to this, we shall be pleased if you would telephone us. We would appreciate as prompt action as possible on this job.

Yours very truly,

LOCK JOINT PIPE COMPANY,

Hugh F. Kennison,
Design Engineer.

HFK:BR

Enclosure.

DEFENDANT'S EXHIBIT "Y"

Raybestos-Manhattan, Inc.
Manhattan Rubber Division
Passaic, New Jersey

Please Reply Attention of Writer

June 10, 1946

Lock Joint Pipe Company
P. O. Box 269
East Orange, N. J.

Attention: Mr. Hugh F. Kennison, Design Engineer
Gentlemen:

We have shipped you under our order 2725-CNY under date of June 5 the rubber covered steel drums which you sent us. We trust that this is in line with the type of thing that you had in mind and we will be glad to learn whether or not this rubber covering meets your requirements.

If there is anything else that we can do for you in connection with this development, we will be only too happy to cooperate.

Very truly yours,

MANHATTAN RUBBER DIVISION
William L. White,
Director of Research and
Product Design.

SLD

DEFENDANT'S EXHIBIT "AH"

American Pipe and Construction Co.

August 9, 1956

Stamped—Received 9:30 A.M., August 11, 1956.

Mr. Spencer A. Earnshaw
132 East 77th Street
Los Angeles, California

Dear Sir:

We call your attention to your agreement with this Company dated February 8, 1944, entitled "Option Agreement."

Patent #2,168,329 referred to therein having expired at midnight of August 8, 1956, said agreement likewise expired at the same time.

Please regard this letter as formal notice of termination of said Option Agreement.

Yours very truly,

G. Crawford,
Secretary-Treasurer.

GC:mh

bcc: Mr. F. D. MacDowell
Hill, Farrer & Burrill

Registered * Return Receipt Requested.

DEFENDANT'S EXHIBIT "AI"

J. Marion Wright
Attorney-at-Law

August 24, 1956

Stamped—Received 9:30 A.M., August 25, 1956.

American Pipe and Construction Co.

P. O. Box 3428

Terminal Annex

Los Angeles 54, California

Attention: G. Crawford, Secretary-Treasurer

In re: Earnshaw v. American Pipe

Gentlemen:

Reference is made to your photostat copy of letter dated August 9, 1956, sent by registered mail to Mr. Spencer A. Earnshaw, calling attention to your agreement with him dated February 8, 1944, and stating that Patent No. 2,168,329 referred to therein having expired at midnight August 8, 1956, that said agreement likewise expired at the same time.

Please be advised that said agreement of February 8, 1944, provides that if either American Pipe or Earnshaw invents any improvements to the processes and methods of Patent No. 2,168,329 which, in the judgment of American are applicable to the manufacture, or lining, or coating of pipe, the said improvements shall inure to the benefit of both parties, on the terms set forth in said agreement,

and American will pay for the costs of patenting same. Mr. Earnshaw secured patents on improvements to the processes and methods of said patent and although you did not pay for same your attention was called to such improvements, and copies of the patented improvements were given you and you have been using said improvements and under such circumstances the original patent does not terminate nor does the agreement of February 8, 1944, terminate as long as you are using said improvements and until the expiration of the patent on same.

Therefore, Mr. Earnshaw cannot regard your letter as formal notice of termination of either the patent or the option agreement.

Very truly yours,

J. MARION WRIGHT.

JMW:vs

cc: Mr. J. Calvin Brown

Messrs. Hill, Farrer & Burrill

Frank D. MacDowell

Mellin, Hanscom & Hursh

Oscar A. Mellin

DEFENDANT'S EXHIBIT "AJ"

J. Marion Wright
Attorney-at-Law

August 27, 1956

Stamped—Received 9:30 A.M., August 28, 1956.

American Pipe and Construction Co.

P. O. Box 3428 Terminal Annex

Los Angeles 54, Calif.

Attention: G. Crawford, Secretary-Treasurer

Re: Earnshaw v. American Pipe, etc.

Gentlemen:

Reference is made to my letter of August 24, 1956 in connection with the above matter. I find that through inadvertence the letter is not correct, and I wish to correct it as follows:

Mr. Earnshaw did not secure patents on improvements to the processes and methods of the patent, but secured improvement patents to No. 2,168,329 on the machine under which you have a license. Copies of said patented improvements were given you and you have been using said improvements. The patent did terminate on August 8, 1956, but the contract carries on as long as you are using said improvements and until the expiration of the patent on same.

Therefore, Mr. Earnshaw cannot regard your letter as a formal notice of the termination of the option agreement.

Very truly yours,

J. MARION WRIGHT.

JMW B

cc: to Mr. J. Calvin Brown

Messrs. Hill, Farrer & Burrill

Frank D. MacDowell

Mellin, Hanscom & Hursh

Oscar A. Mellin

DEFENDANT'S EXHIBIT "AK"

PRIOR ART RELIED UPON

Patent No.	Inventor	Patented
15,280	C. N. Clow	July 8, 1856
21,102	J. D. Willoughby	Aug. 3, 1858
250,976	H. Riedel	Dec. 13, 1881
2,368,742	W. R. Brend	Feb. 6, 1945
2,380,499	W. R. Brend	July 31, 1945
2,451,603	V. D. Barker	Oct. 19, 1948
2,530,767	W. W. Hamill	Nov. 21, 1950
2,550,781	R. R. Colburn	May 1, 1951
2,554,637	C. A. Rerick	May 29, 1951
2,567,699	G. A. Devlin	Sept. 11, 1951
2,603,383	R. W. Wilson	July 15, 1952

